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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,240	11/14/2001	Motti Shechter	0208.0070C	6407

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EXAMINER	
SAADAT, CAMERON	

ART UNIT	PAPER NUMBER
3713	

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/987,240	SHECHTER ET AL.	
	Examiner	Art Unit	
	Cameron Saadat	3713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/6/2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *See Continuation Sheet* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *80, 82-84, 86-94, 96-98, 100, 102-109, 111-120, 122-124, 126-133, 135-137, 140-147, 149-156* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/20/2004; 4/6/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 80,82-84,86-94,96-98,100,102-109,111-120,122-124,126-133,135-137,140-147 and 149-156.

DETAILED ACTION

In response to amendment filed 9/20/2004, claims 80, 82-84, 86-94, 96-98, 100, 102-109, 111-120, 122-124, 126-133, 135-137, 140-147, 149-156 are pending in this application. Claims 1-79, 81, 85, 95, 99, 101, 110, 121, 125, 134, 138-139, 148, and 157-177 have been cancelled.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 80,108, 120, 146 and their respective dependent claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "different remote location" is vague and it is not clear how the remote locations are different.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 80, 82-84, 86-90, 92-94, 96-98, 100, 102-104, 106-109, 111-116, 118-120, 122-124, 126-129, 131-133, 135-137, 140-142, 144-147, 149-153, and 155-156 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikematsu et al. (USPN 5,613,913; hereinafter Ikematsu) in view of Marshall et al. (USPN 4,923,402; hereinafter Marshall).

Regarding claims 94, 108, 133, and 146, Ikematsu discloses a network training system to enhance a physical skill of a subject and to facilitate a competition with respect to operation of a firearm, comprising: control box 200 connected to a plurality of activity processing systems (Col. 3, lines 35-41) each at a different remote location (Battle Stages 1-3) and in communication to transfer information with each other via a network (See Fig. 1) to facilitate joint training and to measure performance of physical operation of a firearm by the subject, each activity processing system including: an activity measuring device to measure performance of the physical firearm operation by the subject by identifying impact of a laser beam emitted from a firearm to a target 300; and a processor to evaluate the measured performance based on predetermined criteria and produce result information and physical skill of the subject with respect to firearm operation (Col. 3, lines 50-57); and an information device to provide the result information to the subject relating to the performance of the firearm operation (Col. 3, lines 24-26). Ikematsu discloses all of the claimed subject matter with the exception of explicitly disclosing the feature of identifying *coordinates* of impact locations on a target. However, it is the examiner's position that the feature of identifying coordinates of a laser beam impact location on a target is old and well known for determining a user's skill level in aiming a weapon. Furthermore, Marshall discloses training system for training a subject how to operate of a firearm, wherein coordinates of a laser impact location are identified in order to determine a trainee's ability to maintain a steady aim (Col. 4, line 59 – Col. 5, line 30). Hence, in view of Marshall, it would have been obvious to one of ordinary skill in the art to modify the activity measuring device described in Ikematsu, by identifying impact *coordinates* in order to determine a user's skill level in aiming a weapon.

In addition, it is noted that Ikematsu does not specifically disclose that the feedback information is associated with modifying a trainee's performance to enhance performance results. However, Marshall discloses a firearm training system comprising an instructor system that communicates with a plurality of trainee stations (Col. 4, lines 8-10), wherein a trainee receives feedback associated with his/her performance in operating a firearm, and wherein the feedback information includes *guidance associated with modifying performance* (Col. 3, lines 15-25; Col. 5, lines 30-59). Thus, in view of Marshall, it would have been obvious to an artisan to modify the feedback information described in Ikematsu, by providing feedback associated with modifying a trainee's performance; thereby providing specific guidance to correct errors in performance that deviate from the techniques practiced by an expert marksman.

Regarding claims 80, 120, and 126, Ikematsu discloses a network training system to enhance a physical skill of a subject and to facilitate a competition with respect to operation of a firearm, comprising: an activity processing system 200 at a first remote location (Battle Stage 1) to facilitate and measure performance of physical operation of a firearm by the subject, the activity processing system including: an activity measuring device to measure performance of said physical firearm operation by the subject by identifying impact on a target of a laser beam emitted from the firearm in response to a firearm operation(Col. 4, lines 35-39); and a processor to evaluate the measured performance based on predetermined criteria and produce result information and physical skill of the subject with respect to firearm operation(Fig. 7, S24-28); an information device to provide the result information to the subject relating to the performance of the firearm operation (Col. 3, lines 24-26); and an information system 100 at a second different remote location, in communication via a network with the activity processing system and accessible by an instructor, wherein the information device provides feedback information to the subject based on the performance results (Col. 3, lines 15-57). Ikematsu discloses all of the claimed subject matter with the exception of explicitly disclosing the feature of identifying *coordinates* of impact locations on a target. However, it is the examiner's position that the feature of identifying coordinates of

a laser beam impact location on a target is old and well known for determining a user's skill level in aiming a weapon. Furthermore, Marshall discloses training system for training a subject how to operate of a firearm, wherein coordinates of a laser impact location are identified in order to determine a trainee's ability to maintain a steady aim (Col. 4, line 59 – Col. 5, line 30). Hence, in view of Marshall, it would have been obvious to one of ordinary skill in the art to modify the activity measuring device described in Ikematsu, by identifying impact *coordinates* in order to determine a user's skill level in aiming a weapon.

In addition, it is noted that Ikematsu does not specifically disclose that the feedback information includes potential causes of shooting errors and wherein the feedback information is used to modify a trainee's performance to enhance performance results. However, Marshall discloses a firearm training system comprising an instructor system that communicates with a plurality of trainee stations (Col. 4, lines 8-10), wherein a trainee receives feedback associated with his/her performance in operating a firearm, and wherein the feedback information includes *potential causes of shooting errors* for *enhancing the trainee's performance* (Col. 3, lines 15-25; Col. 5, lines 30-59). Thus, in view of Marshall, it would have been obvious to an artisan to modify the feedback information described in Ikematsu, by providing feedback that includes potential causes of shooting errors; thereby providing specific guidance to correct errors in performance that deviate from the techniques practiced by an expert marksman.

Regarding claims 82, 96, 111, 122, 135, and 149, Ikematsu discloses a network training system wherein the activity measuring device includes a laser detecting target to detect impact locations of a laser beam emitted from a laser-transmitting firearm actuated by the subject (Col. 4, lines 35-39).

Regarding claims 83, 97, 112, 123, 136, and 150, Ikematsu discloses a network training system wherein the target includes a detector to measure a distance between the firearm and the target to verify proper conditions for performance of the firearm activity (Col. 3, lines 48-52; Figs. 6A and 6B).

Regarding claims 84, 98, 124, and 137, Ikematsu discloses a network training system wherein the physical activity includes cognitive knowledge of a subject (operation of a firearm), and wherein

feedback information with regards to firearm operation performance results is provided to the subject, and wherein feedback information is associated with increasing a subject's cognitive knowledge (upon reviewing performance results a subject inherently increases his or her awareness of his or her performance level) *Col. 3, lines 24-26.*

Regarding claims 86, 100 and 113, Ikematsu discloses a network training system wherein an information device is a display and a printing device (Fig. 5, S13; Fig. 7, S31).

Regarding claim 87, Ikematsu discloses a network training system wherein a plurality of processing systems 100 and 200 are in communication with each other to provide joint training (Col. 3, lines 24-57).

Regarding claims 88, 102, 114, 127, 140, and 151, Ikematsu discloses a network training system wherein the processor includes a storage module to store produced information for retrieval and analysis (Col. 2, lines 5-16).

Regarding claims 89, 103, 115, 128, 141, and 152, Ikematsu discloses a network training system wherein a plurality of information systems are in communication with a processing system via a network to provide information to at least one interested party (Col. 3, lines 24-39).

Regarding claims 90, 104,116, 129, 142, and 153, Ikematsu discloses all of the claimed subject matter with the exception of explicitly disclosing a module for storing a subject's performance history. However, Marshall discloses a training system for training a subject how to operate of a firearm, wherein a subject's performance history is gathered and evaluated (Col. 5, lines 53-59). Hence, in view of Marshall, it would have been obvious to an artisan to modify the performance results described in Ikematsu by storing the results for further analysis, in order to compare the subject's performance results against a standard to accurately determine the subject's performance level.

Regarding claims 92, 106, 131, and 144, Ikematsu discloses a network training system wherein the performance result indicates a degree of compliance with a predetermined criteria (Fig. 7, S26).

Regarding claims 93, 107, 132, and 145, Ikematsu discloses a network training system wherein the predetermined criteria includes at least one standard level of performance associated with the physical activity (Col. 3, lines 24-28).

Regarding claims 109 and 147, Ikematsu discloses a network training system comprising a control system 200 to control transfer of participant information over a network.

Regarding claims 118, 119, 155, and 156, Ikematsu discloses all of the claimed subject matter with the exception of explicitly disclosing that the performance results are expressed in the form of a score. However, it is the examiner's position that expressing performance results in the form of a score is well known in the are, and it would have been obvious to an artisan to modify the performance results described in Ikematsu by presenting results in the form of a score value in order to track progress.

Claims 91, 105, 117, 130, 143, and 154 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikematsu et al. (USPN 5,613,913; hereinafter Ikematsu) in view of Marshall et al. (USPN 4,923,402; hereinafter Marshall), further in view of Macri et al. (USPN 5,890,906; hereinafter Macri).

Regarding claims 91, 105, 117, 130, 143, and 154, Ikematsu discloses a network training system wherein each subject receives personal feedback. Neither Ikematsu nor Marshall explicitly discloses an identification module. However, Macri discloses a network training system comprising an identification module to provide access to the system (Col. 9, line 54). Thus in view of Macri, it would have been obvious to an artisan to modify the network training system described in the combination of Ikematsu and Marshall, by providing an identification module in order to keep track of each user and his or her performance history.

Response to Arguments

Applicant's arguments filed 9/20/2004 have been fully considered but they are not persuasive. Applicant emphasizes that Ikematsu discloses a single location as opposed to *different remote locations*

for a subject and/or activity measuring device and an instructor information system in communication via a network to provide remote training. However, the examiner respectfully disagrees since claims are given their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). According to Merriam Webster Dictionary provides the following definition for the term *remote*, "separated by an interval or space greater than usual". In Figure 1 and Column 3, lines 24-39, Ikematsu discloses battle stage rooms 1-3; comprising control boxes 200, which communicate with subsystems and activity measuring devices 300 located in each room; and a host (instructor) computer 100 located outside of the battle stage rooms. The activity measuring devices in battle stage rooms 1-3 and host computer 100 are separated by an interval or space greater than usual since the devices are networked and located in separate rooms. Thus, Ikematsu discloses the feature of providing activity measuring devices and an instructor system in *remote locations*. In addition, the phrase "different remote location" is vague since it is not clear how the remote locations are different.

It is further asserted by applicant that Ikematsu discloses detection of a hit on a target, yet there is no disclosure, teaching, or suggestion of identifying coordinates of those hits. Although Ikematsu does not explicitly disclose the feature of determining coordinates of a hit on a target it is the examiner's position that Marshall teaches this feature, and an artisan would be motivated to modify the target described in Ikematsu to provide this feature.

Applicant additionally emphasizes that it would not be obvious to combine the teachings of Ikematsu, Marshall, and Macri since Ikematsu is directed toward arranging targets for a shooting game, Marshal is directed toward a marksmanship trainer, and Macri is directed toward a system for providing virtual training for an activity without the use of any activity equipment. The examiner respectfully

disagrees. Both Ikematsu and Marshal disclose simulated firearm stations in communication with an instructor station. Ikematsu and Marshall disclose all of the claimed subject matter with the exception of explicitly disclosing an identification module. However, Macri discloses a network training system comprising an identification module to provide access to the system (Col. 9, line 54). Thus in view of Macri, it would have been obvious to an artisan to modify the network training system described in the combination of Ikematsu and Marshall, by providing an identification module in order to keep track of each user and his or her performance history. Applicant purports that Macri is directed toward a system for providing virtual training for an activity without the use of any activity equipment and therefore teaches away from measuring physical performance of an activity. The examiner disagrees. Macri discloses a physical performance that includes manipulation of a joystick, and therefore does provide virtual training for an activity with the use of activity equipment.

In response to applicant's argument that the combination of references are not directed to training and competition, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing

date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cameron Saadat whose telephone number is (571) 272-4443. The examiner can normally be reached on M-F 9:00 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cameron Saadat
May 24, 2005

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SUPERVISORY PATENT EXAMINER
TC3700